

REMARKS

The Office Action of March 3, 2008 has been reviewed and the Examiner's comments carefully considered. The present Amendment amends claim 1. No new matter has been added. Support for these amendments can be found in the specification and drawings as originally filed. Specifically, support for these amendments can be found in the specification at paragraphs [0087], [0089], and [0095] and Fig. 1a. Accordingly, claims 1-4 are currently pending in this application, and claim 1 is in independent form.

35 U.S.C. §102 Rejections

Claims 1-4 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,863,861 to Bellasio (hereinafter "the Bellasio patent"). Claims 1 and 3 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. 4,334,653 to Whellams (hereinafter "the Whellams patent"). Claims 1 and 3 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. 3,203,642 to Hirst (hereinafter "the Hirst patent"). In view of the above amendments and the following remarks, the Applicants respectfully request reconsideration of this rejection.

As defined by amended independent claim 1, the present invention is directed to a welding wire tangling-prevention device configured to prevent tangling of a welding wire when the welding wire is drawn out from the pail pack. The welding wire is received in a large-capacity pail pack in the form of a vertically-extending tube-shaped wound body including eccentrically-stacked continuous spiral loops. The welding wire tangling-prevention device further includes a ring member laid on a top surface of the tube-shaped wound body, the ring member includes an outer ring having an outer diameter smaller than an inner diameter of the pail pack; an inner ring having an outer diameter smaller than an inner diameter of the outer ring; a plurality of first comb teeth extending from an inner circumferential surface of the outer ring toward the inner ring; and a plurality of second comb teeth extending from an outer circumferential surface of the inner ring toward the outer ring. The welding wire is drawn out from the pail pack and the top surface of the tube-shaped wound body is lowered, thereby freely lowering the ring member, whereby the welding wire is drawn out between the outer and inner rings, the first comb teeth, and the second comb teeth of the inner rings.

The Bellasio patent is directed to an apparatus for paying off wire received in a large-capacity drum (4) in the form of a vertically-extending tube-shaped wound body including eccentrically-stacked continuous spiral loops. The welding wire is drawn out from the drum over both a ring (5) and a tubular structure (13) having a central opening (15). Ring (5) includes a set of first teeth and tubular structure (13) includes a set of second teeth.

Accordingly, the Bellasio patent does not teach or suggest welding wire drawn out between the outer and inner rings, the first comb teeth and the second comb teeth as required by claim 1. Instead, the Bellasio patent requires guiding wire during its unwinding outside of outer ring (5) and completely avoiding the first comb teeth of outer ring (5) which extend inward therein. Therefore, the outer ring (5) and its first comb teeth are not capable of preventing tangles in the wound wire. In contrast, the welding wire tangling-prevention device of independent claim 1 of the present invention requires the welding wire drawn out from the pail pack between the first comb teeth and the second comb teeth of the outer and inner ring, respectively.

In addition, the Bellasio patent fails to teach a ring member laid on a top surface of a tube-shaped wound body. In the Bellasio patent, the ring member (5) rests on a stationary central cylindrical body (2). The ring member is, therefore, not freely lowering as the wire is drawn out as required in independent claim 1 of the present invention.

The Whellams patent is directed to a wire tensioning apparatus having wire (9) which is received in a large-capacity reel holder (10) and the wire (9) is drawn out from the reel holder (10). A member (21) fits slidably on reel holder (10), the member (21) having a plurality of cylindrical portions (22₁, 22₂, 22₃, etc), an outer ring having an outer diameter smaller than an inner diameter of the reel holder (10), and an inner ring (18) having a plurality of cylindrical portions (19₁, 19₂, 19₃, etc), having an outer diameter smaller than an inner diameter of the outer ring (22).

The Hirst patent is directed to a means for removing wire from a reel. The wire (2) is received in a cylindrical container (6). The wire is drawn out from the container (6), through a hood (30) and cap (40) laid on a top surface of a body (38). The hood (30) is attached to the container (6) by means of bolts (4) inserted into an outwardly extending ring (15) of hood (30). The bolts (14) engage a rim (16) of container (6), providing means to adjust the hood (30) vertically with respect to the upper end of the container (6) having an outer diameter smaller than an inner diameter of the container (6), and a cap (40).

Neither the Whellams patent nor the Hirst patent teaches an outer ring having an outside diameter smaller than the inner diameter of a pail pack. In Whellams, the outside diameter (23) of member (21) fits slidingly over the outer surface of the outer wall of the pail pack (10) and therefore has an outside diameter larger than the pail pack. In Hirst, the outer ring (30) includes an outwardly extending rim (15) for attaching the outer ring (30) to the surface of the pail pack (6). Therefore, neither outside diameter is smaller than the inside diameter of the pail pack and thus neither the outer ring member of the Whellams patent nor the Hirst patent is capable of fitting inside the pail pack in order to rest on the tube-shaped wound body and slowly lower as the wire is consumed as required by independent claim 1 of the present invention.

CONCLUSION

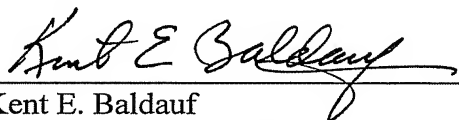
For the foregoing reasons, the Applicants believe that the subject matter of amended independent claim 1 is not anticipated by either the Bellasio patent, the Whellams patent, or the Hirst patent. Reconsideration of the rejection of claim 1 is therefore respectfully requested.

Claims 2-4 depend from and add further limitations to amended independent claim 1 and are believed to be patentable for the reasons discussed hereinabove in connection with amended independent claim 1. Reconsideration of the rejection of claims 2-4 is respectfully requested.

Respectfully submitted,

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